



ATG TCT AGA TTA GAT AAA AGT AAA GTG ATT AAC AGC GCA TTA GAG CTG CTT AAT  
Met Ser Arg Leu Asp Lys Ser Lys Val Ile Asn Ser Ala Leu Glu Leu Asn

GAG GTC GGA ATC GAA GGT TTA ACA ACC CGT AAA CTC GCC CAG AAG CTA GGT GTA  
Glu Val Gly Ile Glu Gly Leu Thr Thr Arg Lys Leu Ala Gln Lys Leu Gly Val

GAG CAG CCT ACA TTG TAT TGG CAT GTA AAA AAT AAG CGG GCT TTG CTC GAC GCC  
Glu Gln Pro Thr Leu Tyr Trp His Val Lys Asn Lys Arg Ala Leu Leu Asp Ala

TTA GCC ATT GAG ATG TTA GAT AGG CAC CAT ACT CAC TTT TGC CCT TTA GAA GGG  
Leu Ala Ile Glu Met Leu Asp Arg His His Thr His Phe Cys Pro Leu Glu Gly

GAA AGC TGG CAA GAT TTT TTA CGT AAT AAG GCT AAA AGT TTT AGA TGT GCT TTA  
Glu Ser Trp Gln Asp Phe Leu Arg Asn Lys Ala Lys Ser Phe Arg Cys Ala Leu

*Fig. 4A*



CTA AGT CAT CGC GAT GGA GCA AAA GTA CAT TTA GGT ACA CGG CCT ACA GAA AAA  
Leu Ser His Arg Asp Gly Ala Lys Val His Leu Gly Thr Arg Pro Thr Glu Lys

CAG TAT GAA ACT CTC GAA AAT CAA TTA GCC TTT TTA TGC CAA CAA GGT TTT TCA  
Gln Tyr Glu Thr Leu Glu Asn Gln Leu Ala Phe Leu Cys Gln Gln Gly Phe Ser

CTA GAG AAT GCA TTA TAT GCA CTC AGC GCT GTG GGG CAT TTT ACT TTA GGT TGC  
Leu Glu Asn Ala Leu Tyr Ala Leu Ser Ala Val Gly His Phe Thr Leu Gly Cys

GTA TTG GAA GAT CAA GAG CAT CAA GTC GCT GCT AAA GAA GAA AGG GAA ACA CCT ACT  
Val Leu Glu Asp Gln Gln Glu His Gln Val Ala Lys Glu Glu Arg Glu Thr Pro Thr

ACT GAT AGT ATG CCG CCA TTA TTA CGA CAA GCT ATC GAA TTA TTT GAT CAC CAA  
Thr Asp Ser Met Pro Pro Leu Leu Arg Gln Ala Ile Glu Leu Phe Asp His Gln

Fig. 4B  
(cont.)



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GGT	GCA	GAG	CCA	GCC	TTC	TTA	TTC	GGC	CTT	GAA	TTG	ATC	ATA	TGC	GGA	TTA	GAA
Gly	Ala	Glu	Pro	Ala	Phe	Leu	Phe	Gly	Leu	Glu	Leu	Ile	Ile	Cys	Gly	Leu	Glu
AAA	CAA	CTT	AAA	TGT	GAA	AGT	GGG	TCC	GCG	TAC	AGC	CGC	GCG	CGT	ACG	AAA	AAC
Lys	Gln	Leu	Lys	Cys	Glu	Ser	Gly	Ser	Ala	Tyr	Ser	Arg	Ala	Arg	Thr	Lys	Asn
AAT	TAC	GGG	TCT	ACC	ATC	GAG	GGC	CTG	CTC	GAT	CTC	CCG	GAC	GAC	GAC	GCC	CCC
Asn	Tyr	Gly	Ser	Thr	Ile	Glu	Gly	Leu	Leu	Asp	Leu	Pro	Asp	Asp	Asp	Ala	Pro
GAA	GAG	GCG	GGG	CTG	GCG	GCT	CCG	CGC	CTG	TCC	TTT	CTC	CCC	GCG	GGA	CAC	ACG
Glu	Glu	Ala	Gly	Leu	Ala	Ala	Pro	Arg	Leu	Ser	Phe	Leu	Pro	Ala	Gly	His	Thr
CGC	AGA	CTG	TCG	ACG	GCC	CCC	CCG	ACC	GAT	GTC	AGC	CTG	GGG	GAC	GAG	CTC	CAC
Arg	Arg	Leu	Ser	Thr	Ala	Pro	Pro	Thr	Asp	Val	Ser	Leu	Gly	Asp	Glu	Leu	His

Fig. 4C  
(cont)



TTA GAC GGC GAG GAC GTG GCG ATG GCG CAT GCC GAC GCG CTA GAC GAT TTC GAT  
 Leu Asp Gly Glu Asp Val Ala Met Ala His Ala Asp Ala Leu Asp Asp Phe Asp

CTG GAC ATG TTG GGG GAC GGG GAT TCC CCG GGT CCG GGA TTT ACC CCC CAC GAC  
 Leu Asp Met Leu Gly Asp Gly Asp Ser Pro Gly Pro Gly Phe Thr Pro His Asp

TCC GCC CCC TAC GGC GCT CTG GAT ATG GCC GAC TTC GAG TTT GAG CAG ATG TTT  
 Ser Ala Pro Tyr Gly Ala Leu Asp Met Ala Asp Phe Glu Phe Glu Met Phe

ACC GAT CCC CTT GGA ATT GAC GAG TAC GGT GGG TAG  
 Thr Asp Pro Leu Gly Ile Asp Glu Tyr Gly Gly \*

Fig. 4D

(cont)



ATG TCT AGA TTA GAT AAA AGT AAA GTG ATT AAC AGC GCA TTA GAG CTG CTT AAT  
Met Ser Arg Leu Asp Lys Ser Lys Val Ile Asn Ser Ala Leu Glu Leu Asn

GAG GTC GGA ATC GAA GGT TTA ACA ACC CGT AAA CTC GCC CAG AAG CTA GGT GTA  
Glu Val Gly Ile Glu Gly Leu Thr Thr Arg Lys Leu Ala Gln Lys Leu Gly Val

GAG CAG CCT ACA TTG TAT TGG CAT GTA AAA AAT AAG CGG GCT TTG CTC GAC GCC  
Glu Gln Pro Thr Leu Tyr Trp His Val Lys Asn Lys Arg Ala Leu Asp Ala

TTA GCC ATT GAG ATG TTA GAT AGG CAC CAT ACT CAC TTT TGC CCT TTA GAA GGG  
Leu Ala Ile Clu Met Leu Asp Arg His His Thr His Phe Cys Pro Leu Glu Gly

GAA AGC TGG CAA GAT TTT TTA CGT AAT AAC GCT AAA AGT TTT AGA TGT GCT TTA  
Glu Ser Trp Trp Gln Asp Phe Leu Arg Asn Ala Lys Ser Phe Arg Cys Ala Leu

*Fig. 5A*

CTA AGT CAT CGC GAT GGA GCA AAA GTA CAT TTA GGT ACA CGG CCT ACA GAA AAA  
 Leu Ser His Arg Asp Gly Ala Lys Val His Leu Gly Thr Arg Pro Thr Glu Lys

CAG TAT GAA ACT CTC GAA AAT CAA TTA GCC TTT TTA TGC CAA CAA GGT TTT TCA  
 Gln Tyr Glu Thr Leu Leu Glu Asn Gln Leu Ala Phe Leu Cys Gln Gln Gly Phe Ser

CTA GAG AAT GCA TTA TAT GCA CTC AGC GCT GTG GGG CAT TTT ACT TTA GGT TGC  
 Leu Glu Asn Ala Leu Tyr Ala Leu Ser Ala Val Gly His Phe Thr Leu Gly Cys

GTA TTG GAA GAT CAA GAG CAT CAA GTC GCT AAA GAA GAA AGG GAA ACA CCT ACT  
 Val Leu Glu Asp Gln Gln His Gln Val Ala Lys Glu Glu Arg Glu Thr Pro Thr

ACT GAT AGT ATG CCG CCA TTA TTA CGA CAA GCT ATC GAA TTA TTT GAT CAC CAA  
 Thr Asp Ser Met Pro Pro Leu Leu Arg Gln Ala Ile Glu Leu Phe Asp His Gln

*Fig. 5B*

*(cont)*



GGT GCA GAG CCA GCC TTC TTA TTC GGC CTT GAA TTG ATC ATA TGC GGA TTA GAA  
Gly Ala Glu Pro Ala Phe Leu Phe Gly Leu Glu Ile Ile Cys Gly Leu Glu

AAA CAA CTT AAA TGT GAA AGT GGG TCT GAT CCA TCG ATA CAC ACG CGC AGA CTG  
Lys Gln Leu Lys Cys Glu Ser Gly Ser Asp Pro Ser Ile His Thr Arg Arg Leu

TCG ACG GCC CCC CCG ACC GAT GTC AGC CTG GGG GAC GAG CTC CAC TTA GAC GGC  
Ser Thr Ala Pro Pro Thr Asp Val Ser Leu Gly Asp Glu Leu His Leu Asp Gly

GAG GAC GTG GCG ATG GCG CAT GCC GAC GCG CTA GAT GAT TTC GAT CTG GAC ATG  
Glu Asp Val Ala Met Ala His Ala Asp Ala Leu Asp Asp Phe Asp Leu Asp Met

TTG GGG GAC GGG GAT TCC CCG GGT CCG GGA TTT ACC CCC CAC GAC TCC GCC CCC  
Leu Gly Asp Gly Asp Ser Pro Gly Pro Gly Phe Thr Pro His Asp Ser Ala Pro

*Fig. 5C*

*(Cont)*





TAC GGC GCT CTG GAT ATG GCC GAC TTC GAG TTT GAG CAG ATG TTT ACC GAT GCC  
 Tyr Gly Ala Leu Asp Met Ala Asp Phe Glu Phe Glu Gln Met Phe Thr Asp Ala

CTT GGA ATT GAC GAG TAC GGT GGG TTC TAG  
 Leu Gly Ile Asp Glu Tyr Gly Gly Phe \*

*Fig 5D-*  
*(cont)*



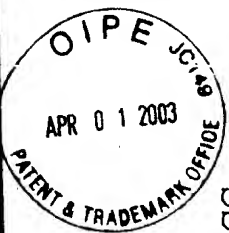
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CGAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAG  
TGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCG  
AGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTCGGTACCCGGTCGAGTA  
GGCGTGTAACGGTGGGAGGCCCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCTGGAG  
ACGCCATCCACGCTGTTTTGACCTCCATAGAAAGACACCGGACCGATCCAGCCTCCGCGGCCCC  
GAATTCGAGCTCGGTACCGGGCCCCCCTCGAGGTCGACGGTATCGATAAGCTTGATATCGAAT  
TCCAGGAGGTGGAGATCCGCGGGTCCAGGCCAAACCCACACCCATTTTCTCCTCCCTCTGCCCC  
TATATCCCGCACCCCTCCTCCTAGCCCTTTCCCTCCTCCGAGAGACGGGGAGGAGAAAAG  
GGGAGTT'AGGTCGACATGACTGAGCTGAAGGCAAGGAACCTCGGGCTCCCCACGTCGGCGGGC  
GGCGGCCCTCCCCACCGAGGTCGGATCCAGCTCCTGGGTGCGCCCGGACCCCTGGCCCCCTTCC  
AGGGGAGCCAGACCTCAGAGGCCCTCGTCTGTAGTCTCCGCCATCCCCATCTCCCTGGACGGGTT

Fig. 9A



GCTCTTCCCCGGCCCTGTACGGGCAGAACCCCCAGACGGGAAGACGCAGGACCCACCGTCCG  
TTGTACAGACGTGGAGGGCGCATTTCTGGAGTCGAAGCCCGGAGGGGCAGGAGACAGCAGCT  
CGAGACCTCCAGAAAGGACAGCGGCTGTCTGGACAGTGTCTCGACACGCTCCTGGCGCCCTC  
GGGTCCCGGCAGAGCCACGCCAGCCCTGCCACCTGCGAGGCCATCAGCCCGTGGTGCTGT  
GGCCCCGACCTTCCCGAAGACCCCGGGCTGCCCCCGCTACCAAGGGGTGTGGCCCCCGCTCA  
TGAGCCGACCCGAGGACAAGGCAGGCGACAGCTCTGGGACGGCAGCGGCCCAACAAGGTGCTGCC  
CAGGGGACTGTCAACCATCCAGGCAGCTGTCTCTCCCTCTCTGGGAGCCCTCACTGGCCGGCA  
GTGAAGCCATCCCCGCAGCCCGCTGCGGTGCAGGTAGACGAGGAGGACAGCTCCGAATCCGAGG  
GCACCGTGGGCCCGCTCCTGAAGGGCCAACTCGGGCACTGGGAGGCA CGCGGCCGAGGAGG  
AGCTGCCCCCGTCTGGAGCGGCCGAGGCGCTGCCCTTGTCCCCAAGGAAGATTCT  
CGCTTCTCGGCGCCAGGTCTCCTTGGCGGAGCAGGACGCGCCGTGGCGCCTGGGCGCTCCC  
CGCTGGCCACCTCGGTGGATTTCATCCACGTGCCCATCCTGCCTCTCAACCGCTTTCCT  
GGCCACCCGCACAGCAGCTGTGGAGGGGAGAGCTACGACGGCGGGGCGCGGCCCGCAGC

Fig. 9B-  
(cont.)



CCCTTCG. CCCGCAGCGGGCTCCCCCTCTGCCTCGTCCACCCCTGTGGCGGGCGGACTTCC  
CCGACTGCACCTACCGCCCGACGCCGAGCCCAAAGATGACGGGTTCCCCCTCTACGGCGACTT  
CCAGCCGCCGCCCTCAAGATAAAGGAGGAGGAAGCCCGAGGCCGCGCGCTCCCCCG  
CGTACGTACCTGGTGGTGCAAAACCCCGCCCTTCCCGGACTTCCAGCTGGCAGCGCCCGC  
CGCCACCTCGCTGCCCTCGAGTGCCCTCGTCCAGACCCGGGGAAGCGGCGGTGGCGGCCCTC  
CCCAGGAGTGCCCTCGTCTCCTCGTCCCTCGTGGGGTCCGACCCCTGGAGTGCATCCTGTAC  
AAGCAGAAAGCGCGCCGCCAGCAGGGCCCCCTTCGCGCCGCTGCCCTGCAAGCCTCCGGGCG  
CCGGCGCCTGCTCCCGGGGACGGCCCTGCCCTCCACCTCCGCTCCGGCGCAGCCGCCCGG  
GGCCGCCCTGCGCTCTACCCGACGCTCGGCCTCAACGAGCTCCCGCAACTCGGCTACCAGGCC  
GCCGTGCTCAAGAGGGCCTGCCGAGGTCTACAGCCCTATCTCAACTACCTGAGGCCGGATT  
CAGAAAGCCAGTCAGAGCCCAAGTACAGCTTCGAGTCACTACCTCAGAAGATTGTTGATCTG  
TGGGGATGAAGCATCAGGCTGTCAATTATGGTGTCTCCTCACCTGTGGAGCTGTAAAGTCTTCTTT  
AAAAGGGCAATGGAAGGCAGCATAACTATTATGTGCTGGAAGAAATGACTGCATTGTTGATA

Fig. 9C  
(cont.)



AAATCCGCAGGAAAAAAGTGCCTTAGAAAGTGCTCAAGCTGGCATGGTCCCT  
TGGAGGGCGAAAGTTTAAAAAGTTCAATAAAGTCAGAGTCATGAGAGCACTCGATGCTGTTGCT  
CTCCACACAGCCAGTGGGCATTCCAAATGAAAGCCAAACGAATCACTTTTCTCCAAGTCAAGAGA  
TACAGTTAATTCCCCCTCTAATCAACCTGTTAATGAGCATGGAACCAGATGTGATCTATGCAGG  
ACATGACAACAAAGCCTGATACCTCCAGTTCTTTGCTGACGAGTCTTAATCAACTAGGCGAG  
CGGCAACTTCTTTCAGTGGTAAAAATGGTCCAAATCTCTTCCAGGTTTTTCGAAACTTACATATTG  
ATGACCAGATAACTCTCATCCAGTATTCTTGGATGAGTTTAATGGTATTTGGACTAGGATGGAG  
ATCCTACAAACATGTCAGTGGCAGATGCTGTATTTTGCACCTGATCTAATAATTAATGAACAG  
CGGATGAAAGAAATCATCTATTCACTATGCCCTTACCATGTGGCAGATACCGCAGGAGTTTG  
TCAAGCTTCAAGTTAGCCAAAGAGATTCTCTGCTGATGAAAGTATTACTACTTCTTAATACAAT  
TCCTTTGGAAAGGACTAAGAAAGTCAAAGCCAGTTTGAAGAGATGAGATCAAGCTACATTAGAGAG  
CTCATCAAAGGCAATTGGTTTGAGGCAAAAAGGAGTTGTTCCAGCTCACAGCGTTTCTATCAGC  
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Fig. 9D  
(cont.)



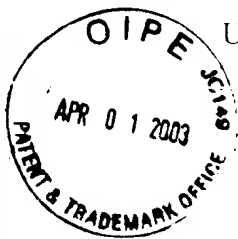
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CTTTATTGTGAAATTTGTGATGCTATTGCTTTATTTTGTAAACCATTATAAGCTGCAATAAACAA  
GTTAACAAACAATTGCATTCATTTTATGTTTCAGGTTTCAGGGGGAGGTGTGGGAGGTTTTTTT  
AAAGCAAGTAAACCTCTACAAATGTGGTATGGCTGATTATGATCCTGCAAGCCTCGTCTGTG  
GCCGGACCAAGCTATCTGTGCAAGTCCCCGGACGCGCTCCATGAGCAGAGCGCCCGCCGCC  
GAGGCAAGACTCGGGCGGCGCCCTGCCCGTCCCACAGGTCAACAGGCGGTAAACCGGCCTCTTC  
ATCGGGGAATGCGCGGACCTTCAGCATCGCCGGCATGTCCCCTGGCGGACGGGAAGTATCAGCT  
CGACCAAGCTTGGCGAGATTTTCAGGAGCTAAGGAAGCTAAAATGGAGAAAAAATCACTGGAT  
ATACCACCGTTGATATATCCCAATGGCATCGTAAAGAACATTTTGAGGCATTTTCAGTCAGTTGC

*Fig. 9E-*  
*(cont)*



TCAATGTACCTATAACCAGACCGTTTCAGCTGCATTAATGAATCGGCCAACGCGGGAGAGGC  
GGTTGCGTATTGGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTCGCTCGCTCGTTCGGC  
TGCGGCGAGCGGTATCAGCTCACTCAAAGCGGTAATACGGTTATCCACAGAAATCAGGGGATAA  
CGCAGGAAAGAACATGTAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTG  
CTGGCGTTTTTCCATAGGCTCCGCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGA  
GGTGGCGAAACCCGACAGGACTATAAGATACCAGCGTTTCCCCCTGGAAGCTCCCTCGTGCG  
CTCTCCTGTTCCGACCCCTGCCGCTTACCGGATACCTGTCCGCCCTTCTCCCTTCGGGAAGCGTG  
GCGCTTCTCAATGCTCAGCTGTAGGTATCTCAGTTCGGTGTAGTCTGTTTCGCTCCAAGCTGG  
GCTGTGTGCACGAACCCCGTTTCAGCCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGA  
GTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGA  
GCGAGGTATGTAGGCGGTCTACAGAGTTCTTGAAGTGTGGCCCTAACTACGGCTACACTAGAA  
GGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTC  
TTGATCCGGCAAAACCAACCGCTGGTAGCGGTGTTTTTTTTTTGTTTGCAGCAGCATTAACG

*Fig. 9F*  
*(Cont.)*



CGCAGAAAAAAGGATCTCAAGAAGATCCTTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGA  
ACGAAACTCACGTTAAGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCT  
TTTAAATTAAAAATGAAGTTTTTAAATCAATCTAAAGTATATAGTAATAACTTGGTCTGACAGT  
TACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCTGTTTCATCCATAGTTG  
CCTGACTCCCCGTCGTGTAGATAACTACGATACGGAGGGCTTACCATCTGGCCCCAGTGCTGC  
AATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCCAGCCGCGGA  
AGGCCGAGCGCAGAAAGTGTCTCTGCAACTTTATCCGCCCTCCATCCAGTCTATTAATTGTTGCC  
GGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGG  
CATCGTGTGTACGCTCGTCTTGTGTATGGCTTCATTACGCTCCGGTTCCTCCAAACGATCAAGG  
CGAGTTACATGATCCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTG  
TCAGAAAGTAAGTTGGCCGAGTGTATCACTCATGTTATGGCAGCACTGCATAAATTCTCTTAC  
TGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAA  
TAGTGTATCGGGACCGAGTTGCTCTTGCCCCGGGTCAATACGGGATAATACCGGCCACATA

Fig. 9G

(cont.)



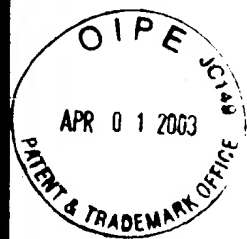
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ACTTTCACCAAGCGTTTCTGGGTGAGCAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAA  
GGCGGACACGGAAATGTTGAATACTCATACTCTTCTTTTCAATATATTGAAGCATTTATCA  
GGGTATTGTCTCATGAGCGGATACATAATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTT  
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CCTATAAAAAATAGGCGTATCACGAGGCCCTTTTCGTC

*Fig. 9H*  
*(cont.)*



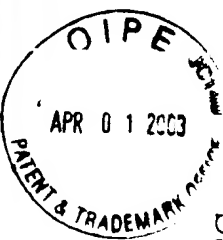
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CGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAG  
TGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCG  
AGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTCGGTACCCGGGTCGAGTA  
GGCGTGTAACGGTGGGAGGCCCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCCTGGAG  
ACGCCATCCACGCTGTTTTGACCTCCATAGAAAGACACCGGACCGATCCAGCCTCCGCGGCCCCC  
GAATTCCGCCACGACCATGACCATGACCCCTCCACACCAAAGCATCTGGGATGGCCCTACTGCA  
TCAGATCCCAAGGGAACGAGCTGGAGCCCCCTGAACCGTCCGCAGCTCAAGATCCCCCTGGAGCGG  
CCCCCTGGCGAGGTGTACCTGGACAGCAGCAAGCCCCCGGTGTACAACCTACCCCGAGGGCGCCG  
CCTACGAGTTCAACGCCCGCGCCGCCCAACGCGCAGGTCTACGGTCAGACCGGCTCCCTCCTA  
CGGCCCCGGGTCTGAGGCTGCGGCGTTTCGGCTCCAACGGCCTGGGGGTTTCCCCCCTCAAC  
AGCGTGCTCCGAGCCCGTGATGCTACTGCAACCCGCGCCGCGAGCTGTGCGCTTTCCTGCGAGC

*Fig. 10A*

CCCACGGCCAGCAGGTGCCCTACTACCTGGAGAACGAGGCCAGCGGCTACACGGTGCGCGAGGC  
CGCCCCCGCGCATTTCTACAGGCCAAATTCAGATAATCGACGCCAGGTGGCAGAGAAAAGATTG  
GCCAGTACCAATGACAAAGGGAAGTATGGCTATGGAATCTGCCAAGGAGACTCGCTACTGTGCAG  
TGTGCAATGACTATGCTTCAGGCTACCATTTATGGAGTCTGGTCTGTGAGGGCTGCAAGGCCCTT  
CTTCAAGAGAAGTATTCAAGGACATAACGACTATATGTGTCCAGCCACCACCAAGTGCCACCAT  
GATAAAACAGGAGGAAGAGCTGCCAGGCCCTCCGGCTCCGCAATGCTACGAAAGTGGGAATGA  
TGAAAGGTGGGATACGAAAGACCCAGAGGAGGAGAAATGTTGAAACACAAGGCCAGAGAGA  
TGATGGGAGGGCAGGGTGAAAGTGGGTCTGCTGGAGACATGAGAGCTGCCAACCTTTGGCCA  
AGCCCCGCTCATGATCAAAACGCTCTAAGAAAGACAGCCTGGCCTTGTCCCTGACGGCCGACCAGA  
TGGTCATGGCCTTGTGGATGCTGAGCCCCCCTACTCTATTCCGAGTATGATCCTACCAGACC  
CTTCAGTGAAGCTTCGATGATGGGCTTACTGACCAACCTGGCAGACAGGAGCTGGTTCACATG  
ATCAACTGGGCGAAGAGGGTGCCAGGCTTTGTGGATTTTGACCCCTCCATGATCAGGTCCACCTTC  
TAGAATGTGCTGGCTAGAGATCCTGATGATTGGTCTCGTCTGGCGCTCCATGGAGCACCCAGT

Fig. 10B

(cont)





GAAAGCTACTGTTTGCTCCTAACTTGCTCTTGACAGGAACAGGAAAAATGTGTAGAGGGCATG  
GTGGAGATCTTCGACATGCTGTGGCTACATCATCTCGGTTCCGCATGATGAATCTGCAGGGAG  
AGGAGTTTGTGTGCCCTCAAATCTATTATTTTGCTTAATTCTGGAGGTACACATTTCTGTCCAG  
CACCCCTGAAGTCTCTGGAAGAGAAGACCATAATCCAGAGTCTCTGGACAAGATCACAGACACT  
TTGATCCACCTGATGGCCCAAGGCAGGCCCTGACCCCTGCAGCAGCAGCACCGGGCTGGCCCCAGC  
TCCTCCTCATCCTCTCCACATCAGGCACATGAGTAACAAAGCATGGAGCATCTGTACAGCAT  
GAAGTGCAAGAACGTGTGCCCCCTCTATGACCTGCTGTGGAGATGCTGGACGCCCCACCGCCCTA  
CATGCGCCCACTAGCCGTGGAGGGGCATCCGTGGAGAGACGACCAAGCCACTTGGCCCACTG  
CGGGCTCTACTTCATCGCATTCCTTGCAAAAGTATTACATCACGGGGGAGGCAGAGGGTTTCCC  
TGCCACAGTCTGAGAGCTCCCTGGCGGAATTCGAGCTCGGTACCCGGGGATCCTCTAGAGGATC  
CAGACATGATAAGATACATTGATGAGTTTGACAAAACCAACTAGAAATGCAGTGAAAAAATG  
CTTTATTTGTGAAAATTTGTGATGCTATTGCTTTATTGTAAACCATTATAAGCTGCAATAACAA  
GTTAAACAACAATTGCATTCTTTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGTTT

Fig. 10C

(Cont.)



AAAGCAAGTAAACCTCTACAAATGTGGTATGGCTGATTATGATCCTGCAAGCCTCGTCGTCTG  
GCCGGACCACGCTATCTGTGCAAGTCCCCGGACGCGGCTCCATGAGCAGAGCGCCCGCCGCC  
GAGGCAAGACTCGGGCGGCCCTGCCCCGTCACCAGGTCAACAGGCGGTAAACCGCCCTCTTC  
ATCGGGAATGCGCGGACCTTCAGCATCGCCGGCATGTCCCCGTGGCGACGGGAAGTATCAGCT  
CGACCAAGCTTGGCGGAGATTTTCAGGAGCTAAGGAAGCTAAAAATGGAGAAAAAATCACTGGAT  
ATACCACCGTTGATATATCCCAATGGCATCGTAAGAACAATTTTGAGGCATTTTCAGTCAGTTGC  
TCAATGTACCTATAACCAGACCGTTTCAGCTGCATTAATGAATCGGCCCAACGCGCGGGAGAGGC  
GGTTTGCGTATTGGGCGCTCTTCCGCTTCCCTCGCTCACTGCTCGCTCGCTCGCTCGTTCCGGC  
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CTGGCGTATTTCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGA  
GGTGCGAAACCGACAGGACTATAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCG  
CTCTCCTGTTCCGACCTGCGCTTACCGGATACCTGTCCGCTTCTCCCTTCGGGAAGCGTG

Fig. 10D

(cont)



GGCCTTTCTCAATGCTCACGCTGTAGGTATCTCAGTTCGGGTAGGTCGTTCCGCTCCAAGCTGG  
GCTGTGTGCACGAACCCCCCGTTTCAGCCCCGACCGCTGCGCCCTTATCCGGTAACTATCGTCTTGA  
GTCCAACCCGGTAAGACACGACTTATCGCCCACTGGCAGCAGCCACTGGTAAACAGGATTAGCAGA  
GGAGGTATGTAGCGGTGCTACAGAGTTCTTGAAGTGGIGGCCCTAACTACGGCTACACTAGAA  
GGACAGTATTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTC  
TTGATCCC GCAAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTTTGTTGCAAGCAGCAGATTACG  
CGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCCTTTTCTACGGGGTCTGACGCTCAGTGGA  
ACGAAACTCACGTTAAGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCT  
TTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGT  
TACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTG  
CCTGATCCCCGTCGTAGATAAATAAGGATACGAGGCTTACCATCTGGCCCCAGTGCTGCA  
ATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGAA  
GGGCCGAGCGCAGAAAGTGGTCTGTGCAACTTTATCCGCCCTCCATCCAGTCTATTAATTGTTGCCG

Fig. 10E

(cont)



GGAAGCTAGAGTAGTTCGCCAGTTAATAGTTTGGCGAACGTTGTTGCCATTGCTACAGGC  
ATCGTGGTGTACAGCTCGTCGTTTGGTATGGCTTCATTTCAGCTCCGGTTCACGATCAAGGC  
GAGTTACATGATCCCCCATGTTGTGCAAAAAGCGTTAGCTCCTTCGGTCCCTCCGATCGTTGT  
CAGAAAGTAAGTTGGCCGCAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACT  
GTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAAT  
AGTGATGCGGCGACCGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGCGCCACATAG  
CAGAACTTTAAAAGTGCTCATCTTGGAACGTTCTTCGGGCGAAAACCTCTCAAGGATCTTA  
CCGCTGTTGAGATCCAGTTCGATGTAAACCCACTCGTGCACCCCAACTGATCTTCAGCATCTTTTA  
CTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAG  
GGCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTCAATATTATTGAAGCATTTATCAG  
GGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAACAAATAGGGGTTT  
CGGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTTATATCATGACATTAAAC  
CTATAAAAATAGCGGTATCACGAGGCCCTTTCGTC

Fig. 10F

(cont.)